

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/20/2019 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : Ultrasol K Plus Acid

Product code : 417_USA

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizers

Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

Restrictions on use : None known

1.3. Supplier

Supplier

SQM North America

2727 Paces Ferry Rd, Building Two, Suite 1425

Atlanta, GA 30339 - United States T (770) 916 9400 - F (700) 916 9404

product safety@sqm.com; spn-northamerica@sqm.com - www.sqm.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week

Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970

(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Oxidizing solids Category 3 May intensify fire; oxidizer Skin corrosion/irritation Category 2 Causes skin irritation Serious eye damage/eye irritation Category 1 Causes serious eye damage

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : May intensify fire; oxidizer
Causes skin irritation

Causes serious eye damage

Precautionary statements (GHS US) : Keep away from heat.

Keep/Store away from clothing and other combustible materials

Take any precaution to avoid mixing with clothing, combustible materials

In case of fire: Use any suitable mean for extinguishing surrounding fire. Spray water for small

fires. For large fires flood with abundant water.

Wash hands, forearms and face thoroughly after handling. Wear protective gloves, eye protection, face protection.

If on skin: Wash with plenty of water

Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing

Immediately call a poison center or doctor

Dispose of contents/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation

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2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

: The product does not meet the PBT and vPvB classification criteria

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Urea phosphate	(CAS-No.) 4861-19-2	1 - 5	Skin Corr. 1B, H314

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell. In all cases of doubt, or when

symptoms persist, seek medical attention. Never give anything by mouth to an unconscious

person.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get

medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation

exposure.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : On ingestion in large quantities: Irritation of the gastric/intestinal mucosa.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. In the event of inhalation of decomposition products: Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : use any suitable mean for extinguishing surrounding fire. Spray water for small fires. For large

fires flood with abundant water.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : May intensify fire; oxidizer.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin

and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow into drains or water courses. Do not allow to enter into surface water or drains.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Do not absorb with saw-dust or any other combustible absorbent material. Mechanically

recover the product. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using th

: Do not eat, drink or smoke when using this product. Always wash hands after handling the $\,$

product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Incompatible

materials: Reducing agents, flammable materials, Combustible materials. Keep container

closed when not in use. Store in a well-ventilated place.

Incompatible materials : Flammable or combustible materials. reducing materials. strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Urea phosphate (4861-19-2)

Not determined

Additional information : There exist no exposure limits for this material

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Effective contaminant extraction. Training staff on

good practice. Management/supervision in place to check that RMMs on place are being used

correctly and OCs followed.

Environmental exposure controls : Do not allow to enter drains or water courses.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline powder.

Color : White
Odor : odorless
Odor threshold : Not applicable
pH : No data available
Melting point : No data available
Freezing point : Not applicable

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Boiling point : No data available Flash point : Not applicable Relative evaporation rate (butyl acetate=1) : Not applicable Flammability (solid, gas) : Non flammable. Vapor pressure Not applicable Vapor pressure at 50 °C Not applicable Relative vapor density at 20 °C : Not applicable Relative density Not applicable : Soluble in water. Solubility Log Pow : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic No data available Viscosity, dynamic : Not applicable **Explosion limits** : Not applicable Explosive properties : Not explosive

Oxidizing properties : Oxidizer. Test O.1 Test for oxidizing solids.

9.2. Other information

Additional information : None

SECTION 10: Stability and reactivity

10.1. Reactivity

May cause or intensify fire; oxidizer.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Respiratory or skin sensitization Germ cell mutagenicity

Combustible materials. flammable materials. Reducing agents. strong acids. Flammable, combustible, strong acids and strong reducing agents under specific conditions. These incompatible materials shall not include approved packaging materials, pallets, or other dunnage (NFPA 400/2016, Hazardous Materials Code, item 15.3.5.2.1.1).

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. thermal decomposition may produce: Nitrogen oxides. Nitrites. Phosphorus oxides. Potassium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Urea phosphate (4861-19-2)	
LD50 oral rat	2600 mg/kg body weight (OECD 423 method)
ATE US (oral)	2600 mg/kg body weight
Skin corrosion/irritation :	Causes skin irritation.
Serious eye damage/irritation :	Causes serious eye damage.

Carcinogenicity	: Not classified
Ultrasol K Plus Acid	
IARC group	Not listed

: Not classified

: Not classified

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Reproductive toxicity : Not classified Specific target organ toxicity - single exposure : Not classified Specific target organ toxicity - repeated

exposure

: Not classified

Urea phosphate (4861-19-2)		
NOAEL (oral,rat,90 days)	250 mg/kg bodyweight/day (OECD 422 method)	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.	
Symptoms/effects after inhalation	 Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. 	

: Causes skin irritation. Symptoms/effects after skin contact Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : On ingestion in large quantities: Irritation of the gastric/intestinal mucosa.

SECTION 12: Ecological information

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Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Ecology - water The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Urea phosphate (4861-19-2)	
LC50 fish 1	> 9100 mg/l (Published data)
EC50 Daphnia 1	> 100 mg/l EU C.2 / (OECD 202 method)

12.2. Persistence and degradability

Ultrasol K Plus Acid		
Persistence and degradability	Contains no substances known to be hazardous to the environment.	
Urea phosphate (4861-19-2)		
Persistence and degradability	Persistence and degradability.	

12.3. **Bioaccumulative potential**

	•	
Ultrasol K Plus Acid		
Bioaccumulative potential	Low bioaccumulation potential.	
Urea phosphate (4861-19-2)		
Log Pow	-1.73 at 68°F	
Bioaccumulative potential	Low bioaccumulation potential.	

12.4. **Mobility in soil**

Ultrasol K Plus Acid	
Ecology - soil	Expected to be highly mobile in soil.
Urea phosphate (4861-19-2)	
Ecology - soil	Product adsorbs little onto the soil.

12.5. Other adverse effects

Other adverse effects : May cause eutrophication at very low concentration.

SECTION 13: Disposal considerations

Disposal methods

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Solid waste exhibiting the characteristic of ignitability has the EPA Hazardous Waste Number of D001 according to the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

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Additional information : Perchlorate containing product - Special handling may apply. See

www.dtsc.ca.gov/hazardouswaste/perchlorate and section 15 for more information regarding

California State regulations.

Ecology - waste materials Do not allow to enter drains or water courses. Do not allow material to contaminate surface

water system.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1486 Potassium nitrate (MIXTURE), 5.1, III

UN-No.(DOT) · UN1486

Proper Shipping Name (DOT) : Potassium nitrate

MIXTURE

Class (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : 5.1 - Oxidizer



DOT Packaging Non Bulk (49 CFR 173.xxx) : 213 DOT Packaging Bulk (49 CFR 173.xxx) : 240

DOT Special Provisions (49 CFR 172.102)

: A1 - Single packaging are not permitted on passenger aircraft.

A29 - Combination packaging consisting of outer expanded plastic boxes with inner plastic bags are not authorized for transportation by aircraft.

B120 - The use of flexible bulk containers conforming to the requirements in subpart R and subpart S of part 178 of this subchapter is permitted.

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1,

13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.

T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter. W1 - This substance in a non friable prill or granule form is not subject to the requirements of this subchapter when tested in accordance with the UN Manual of Test and Criteria (IBR, see §171.7 of this subchapter) and is found to not meet the definition or criteria for inclusion in Division 5.1.

DOT Packaging Exceptions (49 CFR 173.xxx) DOT Quantity Limitations Passenger aircraft/rail : 25 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 100 kg

CFR 175.75)

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a **DOT Vessel Stowage Location**

passenger vessel.

Emergency Response Guide (ERG) Number

Other information : No supplementary information available.

IBC code : Not applicable.

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Transportation of Dangerous Goods

Transport document description : UN1486 POTASSIUM NITRATE (MIXTURE), 5.1, III

UN Number : UN1486

Proper Shipping Name (Transportation of

Dangerous Goods)

: POTASSIUM NITRATE

TDG Primary Hazard Classes : 5.1 - Class 5.1 - Oxidizing Substances

Packing group : III - Minor Danger

Explosive Limit and Limited Quantity Index : 5 kg
Passenger Carrying Road Vehicle or Passenger : 25 kg

Carrying Railway Vehicle Index

Transport by sea

Transport document description (IMDG) : UN 1486 POTASSIUM NITRATE (MIXTURE), 5.1, III

UN-No. (IMDG) : 1486

Proper Shipping Name (IMDG) : POTASSIUM NITRATE

Class (IMDG) : 5.1 - Oxidizing substances

Packing group (IMDG) : III - substances presenting low danger

Air transport

Transport document description (IATA) : UN 1486 Potassium nitrate (MIXTURE), 5.1, III

UN-No. (IATA) : 1486

Proper Shipping Name (IATA) : Potassium nitrate

Class (IATA) : 5.1 - Oxidizing Substances

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Urea phosphate (4861-19-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium nitrate (7757-79-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed in DHS (Department of Homeland Security) United States - Chemical of Interest (Apendix A to 6CFR part 27)

SARA Section 311/312 Hazard Classes Physical hazard - Oxidizer (liquid, solid or gas)

15.2. International regulations

CANADA

Urea phosphate (4861-19-2)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Potassium nitrate (7757-79-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Urea phosphate (4861-19-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Potassium nitrate (7757-79-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

National regulations

Urea phosphate (4861-19-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on NZIoC (New Zealand Inventory of Chemicals)

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Potassium nitrate (7757-79-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

Potassium nitrate (7757-79-1)

U.S. - California - Proposition 65 - Other information

California Code of Regulations Title 22 (Health & Safety Code), Chapter 33 : See

http://www.dtsc.ca.gov/hazardouswaste/perchlorate/

SECTION 16: Other information

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Data sources : REACH registrations.

NFPA 704/2017

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.

NFPA specific hazard : OX - Materials that posses oxidizing properties.

Other information : NFPA 400/2016: Hazardous Materials Code: Oxidizer Class 1 (Inorganics Nitrates).

SDS US (GHS HazCom 2012)

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